

Successful introduction of “routine” HIV testing in antenatal care in Botswana

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Definition of “routine” testing

- Providers assume patients will accept HIV tests, just as they would accept other medical tests
- Patients are informed why they need the test, what will be done for them if they have HIV, and that the test is part of routine care
- No special consent forms or procedures
- Patients who refuse receive counseling, and are allowed to refuse if they are certain they do not want the test

Routine HIV testing in Botswana

- Free national programs for PMTCT (started 1999); and ARV therapy (started 2001) – early uptake of both was low
- CDC and others advocated for “routine” HIV testing in Botswana
- In December 2003 Botswana’s President Mogae declared HIV testing “routine” for people who need tests for medical reasons, including pregnant women
- In early 2004 “routine” HIV testing was implemented by the PMTCT program with BOTUSA (CDC-Botswana) assistance

Questions and concerns about routinely testing pregnant women

- Will routine HIV testing deter women from seeking antenatal care (ANC)?
- Will routine testing deter women from returning to the same clinic for more ANC?
- Will women tested “routinely”
 - come back for results,
 - accept PMTCT interventions,
 - disclose their HIV status, and
 - use knowledge of their status to help themselves as frequently as women tested “voluntarily”?

Pregnant women seemed ready for “routine” testing

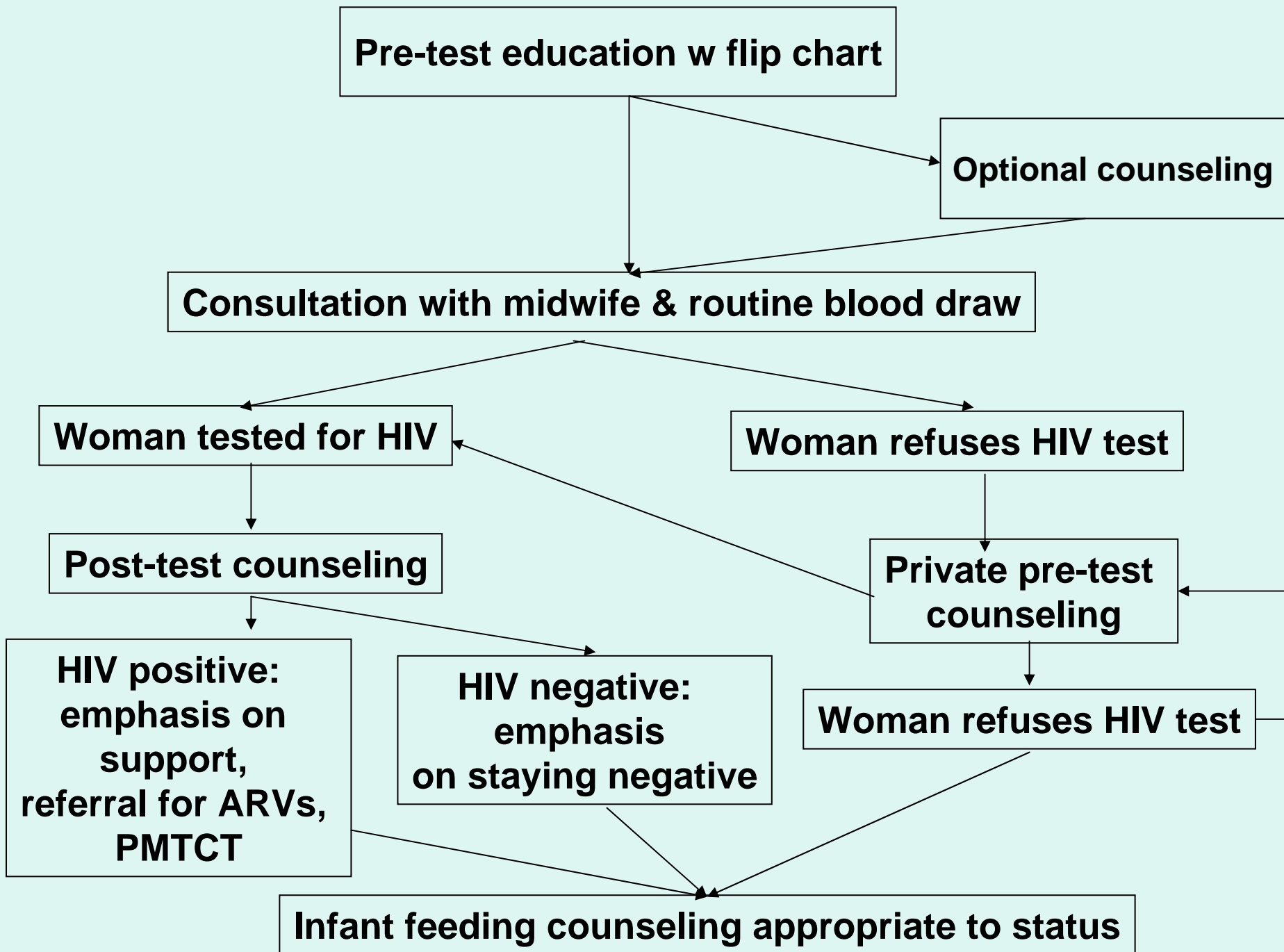
- Operational research site for PMTCT in Francistown, Botswana’s second largest city
- Survey of 504 pregnant & postnatal women done in 2003
 - “Do you think that all pregnant women in Botswana should be tested for HIV?”; 94% said **YES**
 - Knowledge of PMTCT facts predicted HIV test acceptance – indicating that pre-test education had great potential for impact

Methods: “routine” testing pilot project in Francistown

- Protocol and guidelines developed, taught to MOH clinical staff
- 4 large public antenatal clinics were focus of data collection activity (8 other clinics trained, less data collected)
- HIV testing & PMTCT uptake monitored closely for 6 months, compared to the final 3 months of “voluntary” testing
- Client interviews done & compared to 2003 survey

Methods: testing procedures

- All new ANC clients sit for group discussion about PMTCT & HIV testing
 - 10-15 min discussion led by counselor, flip chart used as visual aid to standardize teaching (done individually if no group available)
- Information given via flip chart:
 - Basic PMTCT & ARV program facts
 - Routine ANC described: testing for syphilis, Hb, Rh factor, HIV, diabetes all included
- Women advised to speak to counselor if they have any concerns or if they do not want any of the tests
- Off-site HIV ELISA testing done
- Results at next ANC visit

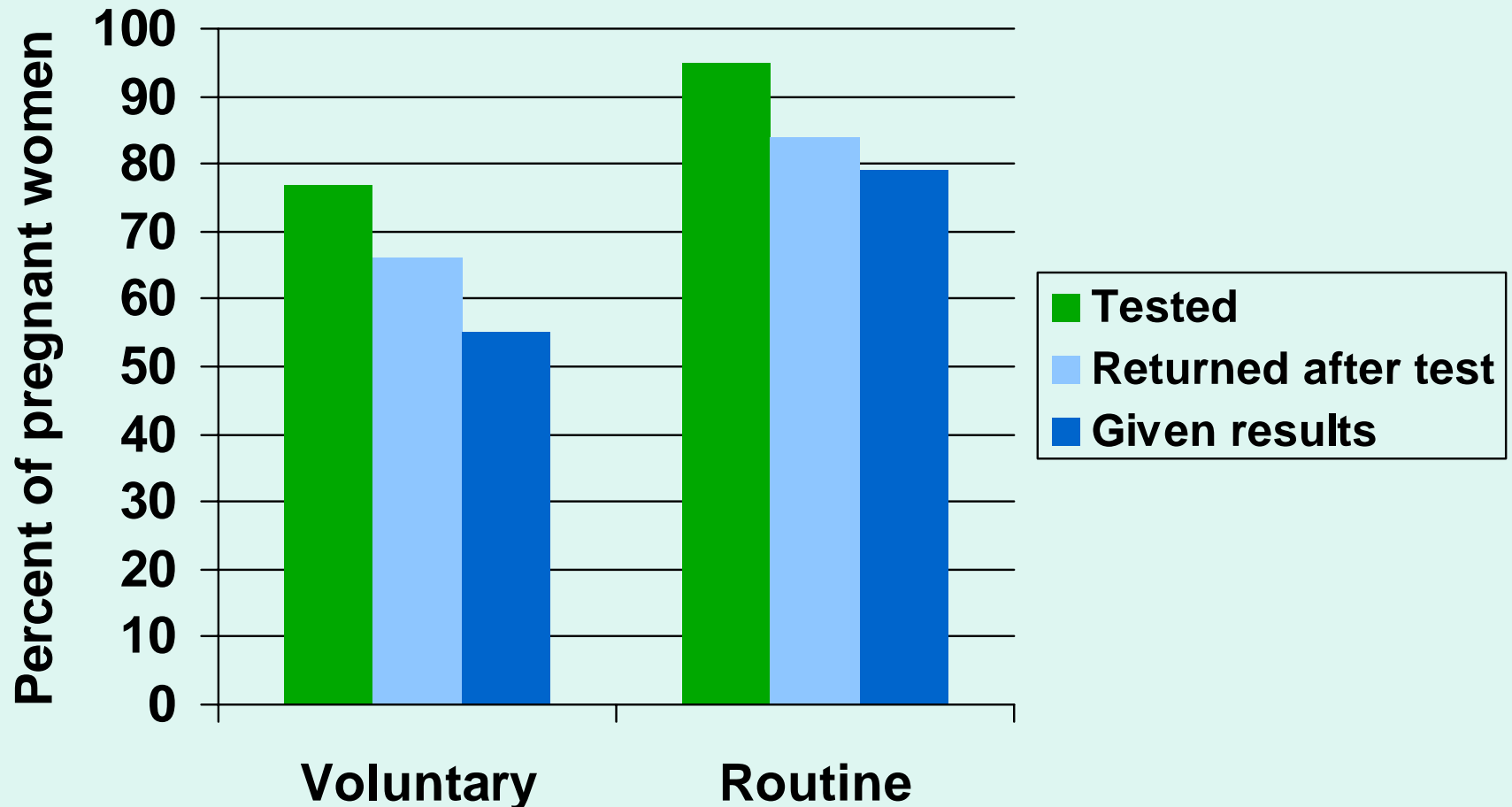


Results

	“Voluntary” N=492	“Routine” N=964	P*
% of new clients tested	76%	95%	<0.05
% of tested who came for more ANC visits after test	86%	89%	0.16
% of tested given results	72%	82%	<0.05
% of women found HIV+ who started AZT	70%	66%	0.6

*Pearson chi-squared

HIV testing in antenatal care using voluntary vs. routine testing strategies – Francistown, Botswana 2003-2004 *(all differences $p < 0.05$)*



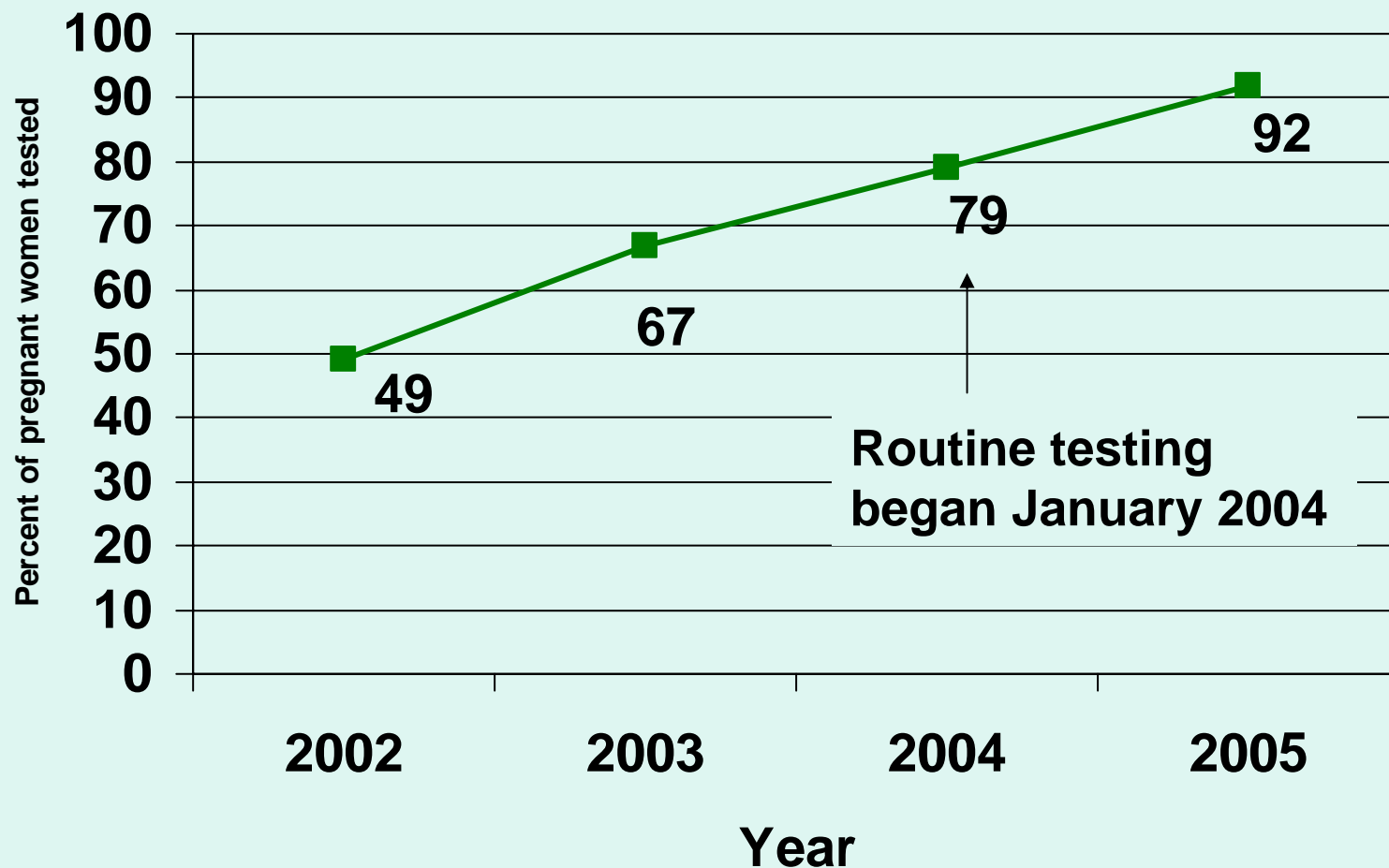
Results

- Number of women receiving tests and results increased significantly
- No difference between “voluntary” and “routine” periods in:
 - Number of new ANC visits per month
 - HIV prevalence (~42%)
 - % of HIV+ women who disclosed their status to someone (84%)
- Knowledge of PMTCT was better after “routine” group discussion
- All women interviewed reported they were glad they were tested
- No woman felt she was forced to test
- No violence experienced by women tested “routinely”

Routine testing in Botswana's national PMTCT program

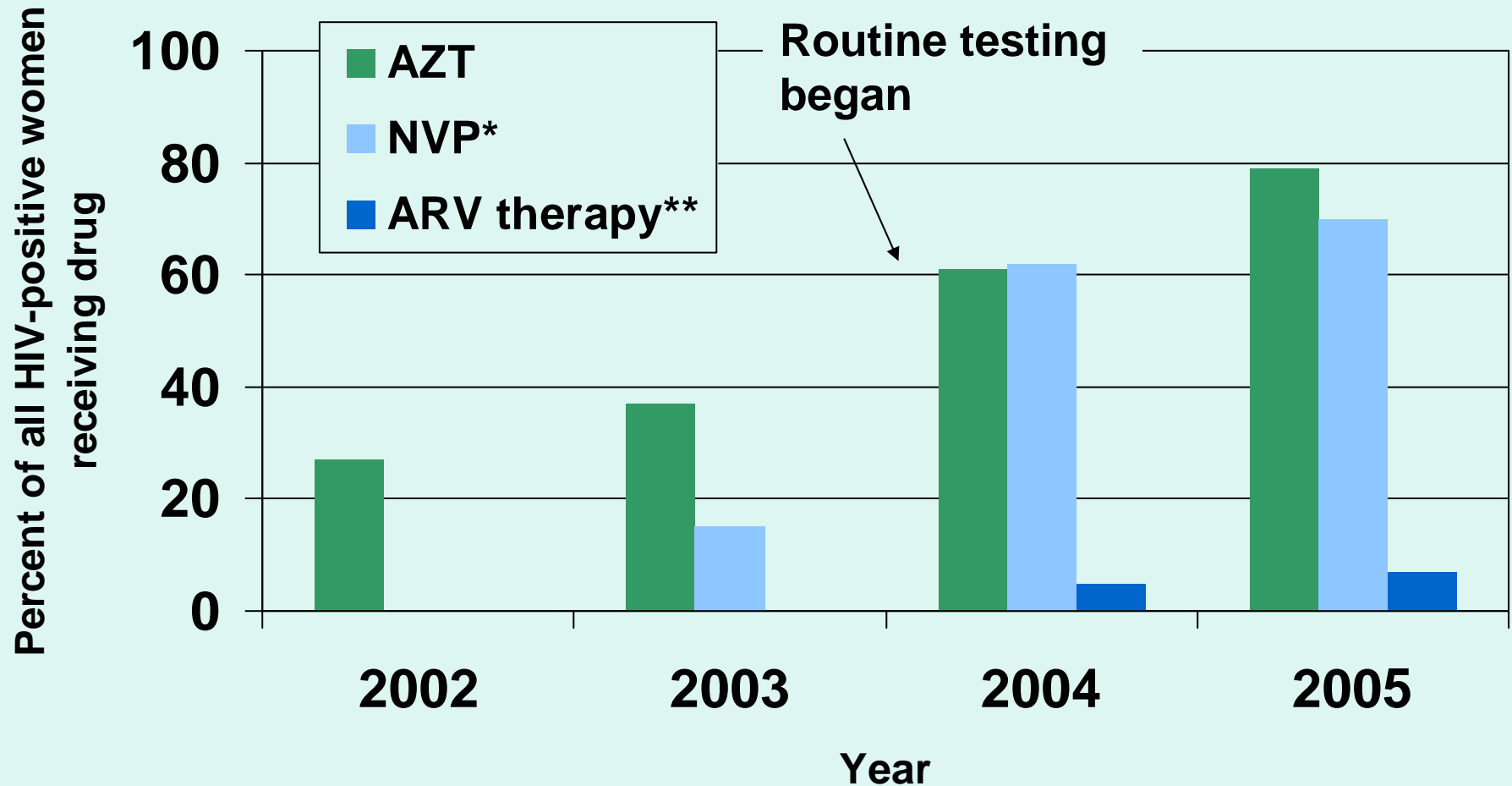
- Successful Francistown protocol used as template for national implementation
- Study tours for staff from all 24 health districts
- Flip charts for group education provided to counselors nationwide
- Impact on program uptake has been profound

Percent of all pregnant women tested for HIV by the end of maternity care, Botswana national PMTCT program, 2002-2005



Percent of all HIV-positive pregnant women receiving antiretroviral drugs during pregnancy, Botswana National PMTCT Program, 2002-2005

(Denominator=total number of deliveries x HIV prevalence from surveillance data)



*NVP uptake estimated from Francistown data due to problem with national data set

**20-25% of pregnant women are eligible for ARV therapy during pregnancy (CD4<200)

Conclusions

- **Routine testing was more acceptable than voluntary testing in this population**
 - Did not deter women from seeking or continuing antenatal care or receiving results
 - Women tested 'routinely' were more likely to receive results and just as likely to receive AZT and disclose HIV status to others
 - Routine testing in the pilot study and nationwide dramatically increased PMTCT program uptake
- **Normalizing HIV testing may enhance HIV care and prevention efforts in other settings**

Acknowledgements

- President of Botswana, His Excellency Festus Mogae
- National PMTCT Program staff
- Nyangabgwe Hospital staff
- Francistown City Council staff
- BOTUSA project staff